

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: Connor Beach, PO Box 545, Baker, MT 59313
2. Type of action: Groundwater Application for Beneficial Water Use Permit 39FJ 30109703
3. Water source name: Groundwater
4. Location affected by project: Section 33, T5N, R59E and Section 1, T4N, R59E, Fallon County
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The Applicant proposes to divert water from groundwater by means of an approximately 5 AC surface area gravel pit for center pivot irrigation on 138.3 AC and stock water. The gravel pit is located in SESE Section 33, T5N, R59E, Fallon County and the proposed place of use is the S2S2 Section 33, T5N, R59E and the N2N2 Section 1, T4N, R59E, Fallon County approximately 4.5 miles southeast of Willard, Montana. The Applicant proposes a flow rate of 1220 GPM (2.72 CFS) and a diverted volume of 367.5 AF. The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.
6. Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)
Montana Department of Fish, Wildlife and Parks
Montana Department of Environmental Quality
Montana Department of Natural Resources and Conservation
Montana Natural Heritage Program
Montana Sage Grouse Habitat Conservation Program
United States Fish and Wildlife Service
United States Natural Resources Conservation Service

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity – The source of water for this project is groundwater. The surface water potentially depleted by the project is Dry Creel an intermittent source approximately 0.1 miles to the east. Dry Creek is not listed as a chronically or periodically dewatered stream by the Montana Department of Fish, Wildlife and Parks. The intermittent character of the stream implies that at some times it is dewatered. Water in the Dry Creek drainage basin is typically diverted by water spreading systems or impounded in on-stream reservoirs when it is available. Depletion of Dry Creek by the proposed project will not change the timing or severity of dewatering.

Determination: No significant impact

Water quality – Use of groundwater impounded in a gravel pit will not affect surface water quality. Dry Creek, the potentially depleted surface water source is not listed by the Montana Department of Environmental Quality as quality impaired or threatened.

Determination: No significant impact

Groundwater – The proposed project would use groundwater flowing into an active gravel pit. The dewatering of the gravel pit reduces groundwater supply in the region but the use of that water for irrigation would have no additional effect. Use of the groundwater for irrigation would not impact groundwater quality. The proposed project will deplete Dry Creek, an intermittent stream just to the east of the gravel pit. The surface water quantity and quality are discussed above.

Determination: No significant impact

DIVERSION WORKS – The means of diversion is an existing gravel pit from which water would be pumped through buried pipe to two center pivot sprinkler systems. The diversion is not on any channel, includes no riparian areas, does not involve dams and will not create a barrier to wildlife.

Determination: No significant impact

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species – Based on a search parameter of T5N, R59E, Fallon County, the Montana Natural Heritage Program lists the Great Blue Heron, Ferruginous Hawk and Greater Sage Grouse as animal species of concern. There are no listed plant species of concern. Use of groundwater for irrigation on currently agricultural ground will not impact any habitat for the listed species. No barriers would be created and the depletion to Dry Creek would not affect fish because the stream does not flow perennially. Although the Greater Sage Grouse is listed as a species of concern in T5N, R59E, Fallon County, mapping by the Montana Sage Grouse Habitat Conservation Program does not include the project area in Sage Grouse habitat.

Determination: No impact

Wetlands – There are no mapped wetlands in the project area and no wetlands are proposed. Apparently swampy areas exist in places along Dry Creek potentially due to irrigation return flow, but due to the intermittent character of the creek, these are not functioning wetlands.

Determination: No impact

Ponds – The existing gravel pit that would serve as the means of diversion for the proposed appropriation is the only pond in the area. No additional ponds are proposed. The open water represented by the gravel pit would tend to have a positive impact on wildlife and waterfowl.

Determination: Possible positive impact

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE – The dominant soils in the project area are Eapa-Yamacall loams and other sandy or silty loams according to soil maps from the United States Natural Resources Conservation Service. These soils are well drained and non-saline to very slightly saline. The slopes in the area are low and irrigation will not alter the soil stability. Use of high efficiency center-pivot sprinklers and the low salt content of the soils will prevent saline seep. Moisture content of the soils will increase due to irrigation.

Determination: No significant impact

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS – Existing vegetative cover is agricultural crops. There will be no change to the vegetative cover. Installation of the center pivots could introduce noxious weeds. It will be the responsibility of the land owner to monitor and control noxious weeds.

Determination: No significant impact

AIR QUALITY – Sprinkler irrigation of existing agricultural land has no potential to affect air quality.

Determination: No impact

HISTORICAL AND ARCHEOLOGICAL SITES – The proposed project is not on State or Federal Lands.

Determination: Not applicable

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY – No other demands on environmental resources not addressed above are recognized.

Determination: No significant impact

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS – There are no known local environmental plans or goals.

Determination: Not applicable

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES – There are no roads to or through the proposed project area and no recreational or wilderness sites in the vicinity.

Determination: No impact

HUMAN HEALTH – Sprinkler irrigation of existing agricultural land has no potential to affect human health.

Determination: No impact

PRIVATE PROPERTY - Assess whether there are any government regulatory impacts on private property rights.

Yes___ No__**X**_ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No significant impact

OTHER HUMAN ENVIRONMENTAL ISSUES - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- (a) Cultural uniqueness and diversity? No significant impact
- (b) Local and state tax base and tax revenues? No significant impact
- (c) Existing land uses? No significant impact
- (d) Quantity and distribution of employment? No significant impact
- (e) Distribution and density of population and housing? No significant impact
- (f) Demands for government services? No significant impact
- (g) Industrial and commercial activity? No significant impact
- (h) Utilities? No significant impact
- (i) Transportation? No significant impact
- (j) Safety? No significant impact

(k) Other appropriate social and economic circumstances? No significant impact

2. Secondary and cumulative impacts on the physical environment and human population:

Secondary Impacts: No secondary impacts are recognized.

Cumulative Impacts: No cumulative impacts are recognized.

3. Describe any mitigation/stipulation measures: None

4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider: The only alternative to the proposed project is the no-action alternative. The no-action alternative prevents the landowner from improving agricultural production which improves the State economy and tax base. The no-action alternative does not prevent any significant environmental impacts.

PART III. Conclusion

1. Preferred Alternative: Issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

2 Comments and Responses: None

3. Finding:

Yes___ No X Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: No significant environmental impacts were recognized in the preparation of this environmental assessment and therefore the assessment is the appropriate level of analysis and an Environmental Impact Statement is not required.

Name of person(s) responsible for preparation of EA:

Name: Mark Elison

Title: Hydrologist

Date: 4/4/2017